

Title (en)

Method and apparatus for displacing drilling fluids with completion and workover fluids

Title (de)

Verfahren und Vorrichtung zur Verdrängung von Bohrspülung mittels Komplettierungs- oder Aufwältigungsflüssigkeiten

Title (fr)

Procédé et dispositif permettant de déplacer des fluides de forage au moyen de fluides de complétion et de fluides de reconditionnement

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Application

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Abstract (en)

The mechanical separation of drilling fluid and a completion fluid by swab cups (86, 88) is used in combination with a casing scraper (90, 92) and movement of the tubing (18) to clean up a wellbore. In a first embodiment, reverse circulation is used placing a completion fluid above swab cups (86, 88) and lowering the pipe (18) to displace a drilling fluid. In a second embodiment, in combination with a casing scraper (90, 92), a completion fluid is pumped into an annulus located below swab cups (86, 88) and the drilling fluid is displaced from above the swab cups (86, 88) by raising the tubing (18). Alternately, large swab cups (360, 362) are shearingly secured in combination with smaller swab cups (370, 372) and casing scraper (380) allowing the apparatus to be used with progressively smaller diameter casing (310) during the same operation of the apparatus.

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